OBSERVATIONS & RECOMMENDATIONS

After reviewing data collected from **BROAD AND LEAVITT BAYS** the program coordinators recommend the following actions. *We would like to encourage the association to conduct more sampling events in the future. With a limited amount of data it is difficult to determine water quality trends. Since weather patterns and activity in the watershed can change throughout the summer it is a good idea to sample the lake several times over the course of the season.*

BROAD BAY

FIGURE INTERPRETATION

- Figure 1: These graphs illustrate concentrations of chlorophyll-a in the water column. Algae are microscopic plants that are a natural part of lake ecosystems. Algae contain chlorophyll-a, a pigment necessary for photosynthesis. A measure of chlorophyll-a can indicate the abundance of algae in a lake. The historical data (the bottom graph) show a *stable* in-lake chlorophyll-a trend, although the concentration has increased the past four years. Algal abundance has remained below the NH mean value for ten years. While algae are present in all lakes, an excess amount of any type is not welcomed. Concentrations can increase when there are external and internal sources of phosphorus, which is the nutrient algae depend upon for growth. It's important to continue the education process and keep residents aware of the sources of phosphorus and how it influences lake quality.

- Figure 2: Water clarity is measured by using a Secchi disk. Clarity, or transparency, can be influenced by such things as algae, sediments from erosion, and natural colors of the water. The graphs on this page show historical and current year data. The lower graph shows a *stable* trend in lake transparency. Water clarity in August was above the NH mean reference line and consistent with last season's results. The 2000 sampling season was considered to be wet and, therefore, average transparency readings are expected to be slightly lower than last year's readings. Higher amounts of rainfall usually cause more eroding of sediments into the lake and streams, thus decreasing clarity.

- Figure 3: These figures show the amounts of phosphorus in the epilimnion (the upper layer in the lake) and the hypolimnion (the

lower layer); the inset graphs show current year data. Phosphorus is the limiting nutrient for plants and algae in New Hampshire waters. Too much phosphorus in a lake can lead to increases in plant growth over time. These graphs show a *fairly stable* trend for in-lake phosphorus levels. Mean phosphorus concentrations in both layers have remained below the median for NH lakes for ten years. This season saw no alarming increase in August phosphorus levels. One of the most important approaches to reducing phosphorus levels is educating the public. Humans introduce phosphorus to lakes by several means: fertilizing lawns, septic system failures, and detergents containing phosphates are just a few. Keeping the public aware of ways to reduce the input of phosphorus to lakes means less productivity in the lake. Contact the VLAP coordinator for tips on educating your lake residents or for ideas on testing your watershed for phosphorus inputs.

OTHER COMMENTS

- Dissolved oxygen was depleted in the last meter of Broad Bay in August (Table 9). The process of decomposition in the sediments depletes dissolved oxygen on the bottom of thermally stratified lakes. As bacteria break down organic matter, they deplete oxygen in the water. When oxygen gets below 1 mg/L, phosphorus normally bound up in the mud may be released into the water column, a process that is referred to as *internal loading*. Depleted oxygen in the hypolimnion usually occurs as the summer progresses. The hypolimnetic phosphorus concentration was low, however if this process continues in the future, the internal source of phosphorus could be greater. Since an internal source of phosphorus to the lake is present, limiting or eliminating external phosphorus sources in the lake's watershed is even more important for lake protection.

- Total phosphorus (Table 8) and conductivity (Table 6) remain low in Broad Bay. This is a positive sign since an increase in either of these factors can indicate human impacts on the lake. Septic system leachate, agricultural runoff, iron deposits, and road runoff can each influence phosphorus and conductivity readings.

- *E. coli* originates in the intestines of warm-blooded animals (including humans) and is an indicator of associated and potentially harmful pathogens. Bacteria concentrations were zero at all the sites tested (Table 12). If residents are concerned about septic system impacts, testing when the water table is high or after rains is best. Please consult the Other Monitoring Parameters section of the report for the current standards for *E. coli* in surface waters.

NOTES

- Monitor's Note (8/11/00): Lots of boat traffic.

LEAVITT BAY

FIGURE INTERPRETATION

- Figure 1: Chlorophyll-a concentrations are *slightly worsening*, but have been fairly stable for the past five years. Diatoms and golden-brown algae were dominant in both Bays. Algal abundance in Leavitt Bay was low in August and, like Broad Bay, the mean chlorophyll concentration has remained below the NH mean reference line for ten years.

- Figure 2: Transparency in Leavitt Bay is *fairly stable, but slightly decreasing*. Water clarity in August was consistent with that observed last season. The increase in rain we experienced this season did not seem to affect transparency results in August, but could have caused a decrease in transparency in the spring. We would like to see the lake sampled more than once as it had been in the past few years.

- Figure 3: The phosphorus concentration has been *stabilizing* in Leavitt Bay. Concentrations in both the epilimnion and hypolimnion were slightly higher this season, but remain well below the NH median. We hope that this continues for Broad and Leavitt Bays.

OTHER COMMENTS

- Dissolved oxygen was depleted in the last three meters of Leavitt Bay in August (Table 9). The process of decomposition in the sediments depletes dissolved oxygen on the bottom of thermally stratified lakes. As bacteria break down organic matter, they deplete oxygen in the water. When oxygen gets below 1 mg/L, phosphorus normally bound up in the mud may be released into the water column, a process that is referred to as *internal loading*. Depleted oxygen in the hypolimnion usually occurs as the summer progresses. This explains the higher phosphorus in the hypolimnion (lower water layer) versus the epilimnion (upper layer), however the hypolimnetic sample was also turbid. The elevated phosphorus concentration was most likely a combination of the two factors. When sounding the bottom of the lake for depth, bottom sediment can be stirred up. This can increase the turbidity of the hypolimnion sample, and also increase the phosphorus concentration, which yields inaccurate results. Since an internal source of phosphorus to the lake is present, limiting or eliminating external phosphorus sources in the lake's watershed is even more important for lake protection.

- *E. coli* results for the site tested at Leavitt Bay were well below the state standard of 406 counts per 100 mL for Class B surface waters (Table 12).

USEFUL RESOURCES

Comprehensive Shoreland Protection Act, RSA 483-B, WD-BB-35, NHDES Fact Sheet. (603) 271-3503 or www.state.nh.us

Bacteria in Surface Waters, WD-BB-14, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Proper Lawn Care Can Protect Waters, WD-BB-31, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Phosphorus in Lakes, WD-BB-20, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

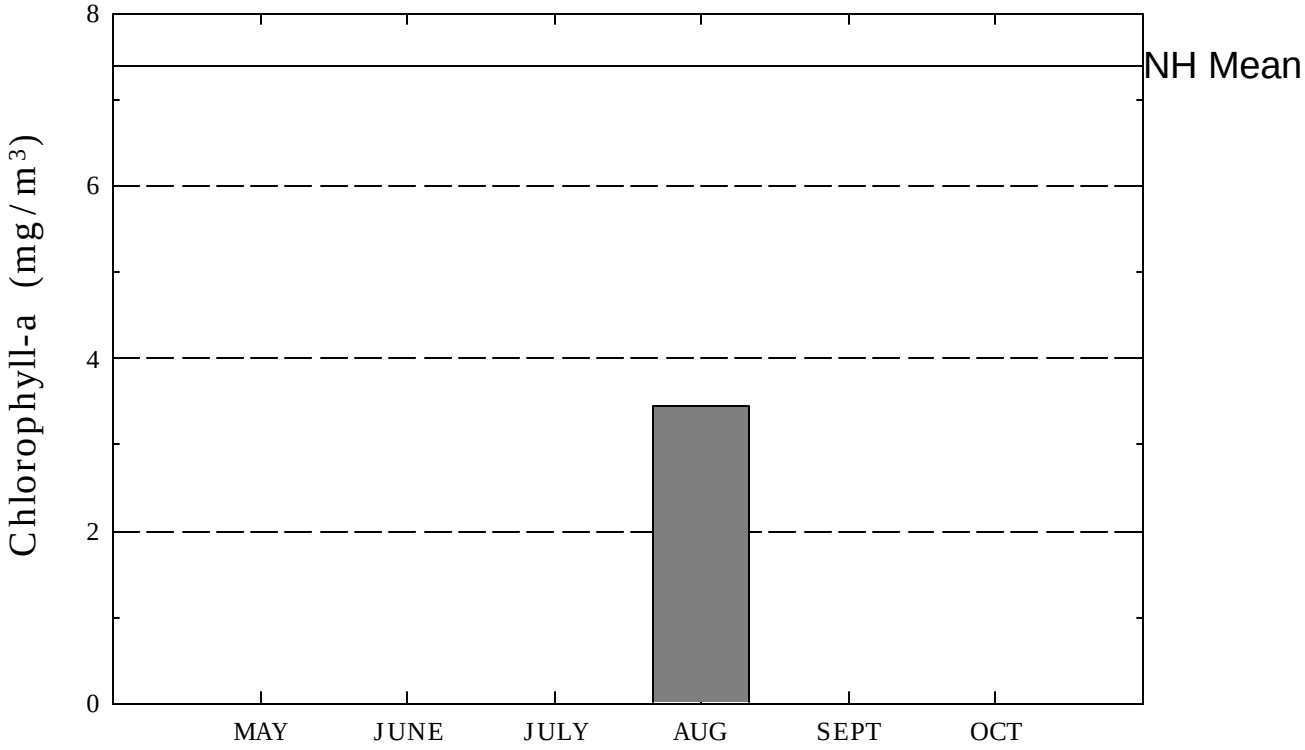
Native or Naturalized Shoreland Plantings for New Hampshire. NHDES Shoreland Protection Program. (603) 271-3503

Nonpoint Source Pollution and Stormwater Fact Sheet Package. Terrene Institute. (800) 726-5253, or www.terrene.org.

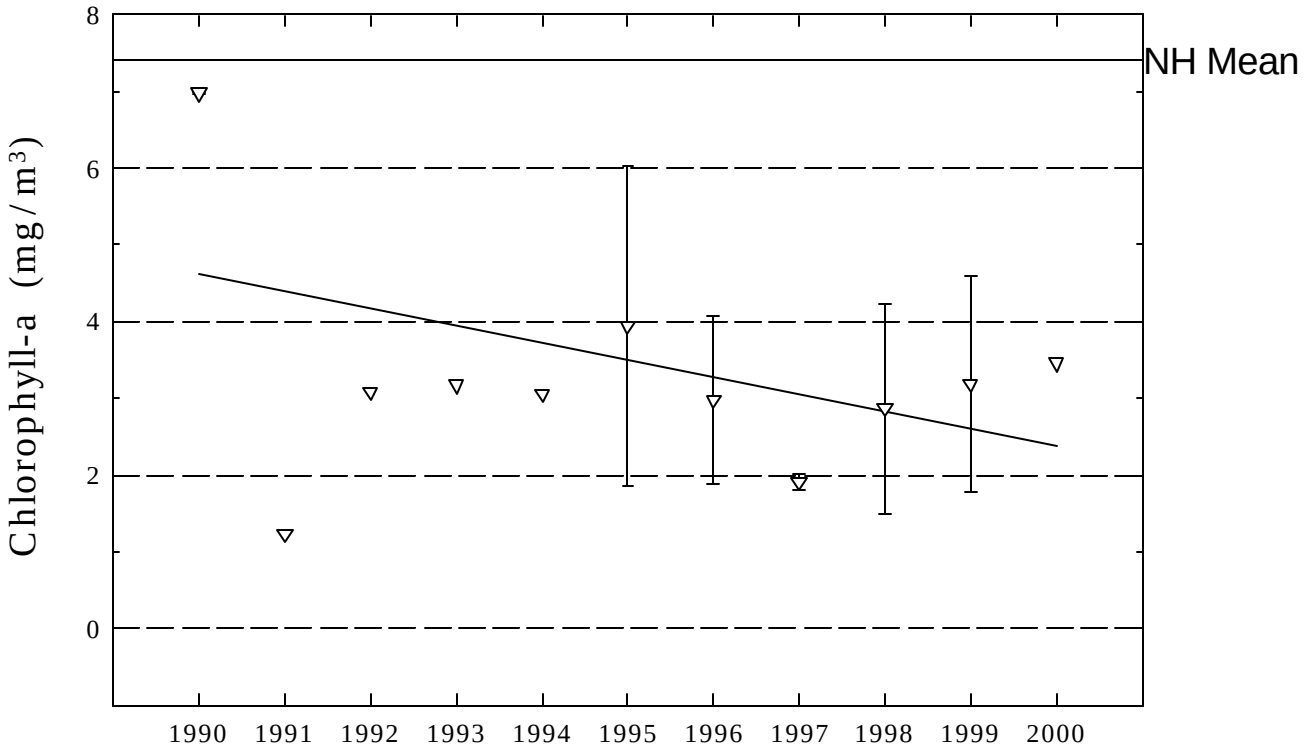
Safe Boating, NH Lakes Association pamphlet, (603) 226-0299 or www.nhlakes.org

Broad Bay

Figure 1. Monthly and Historical Chlorophyll-a Results



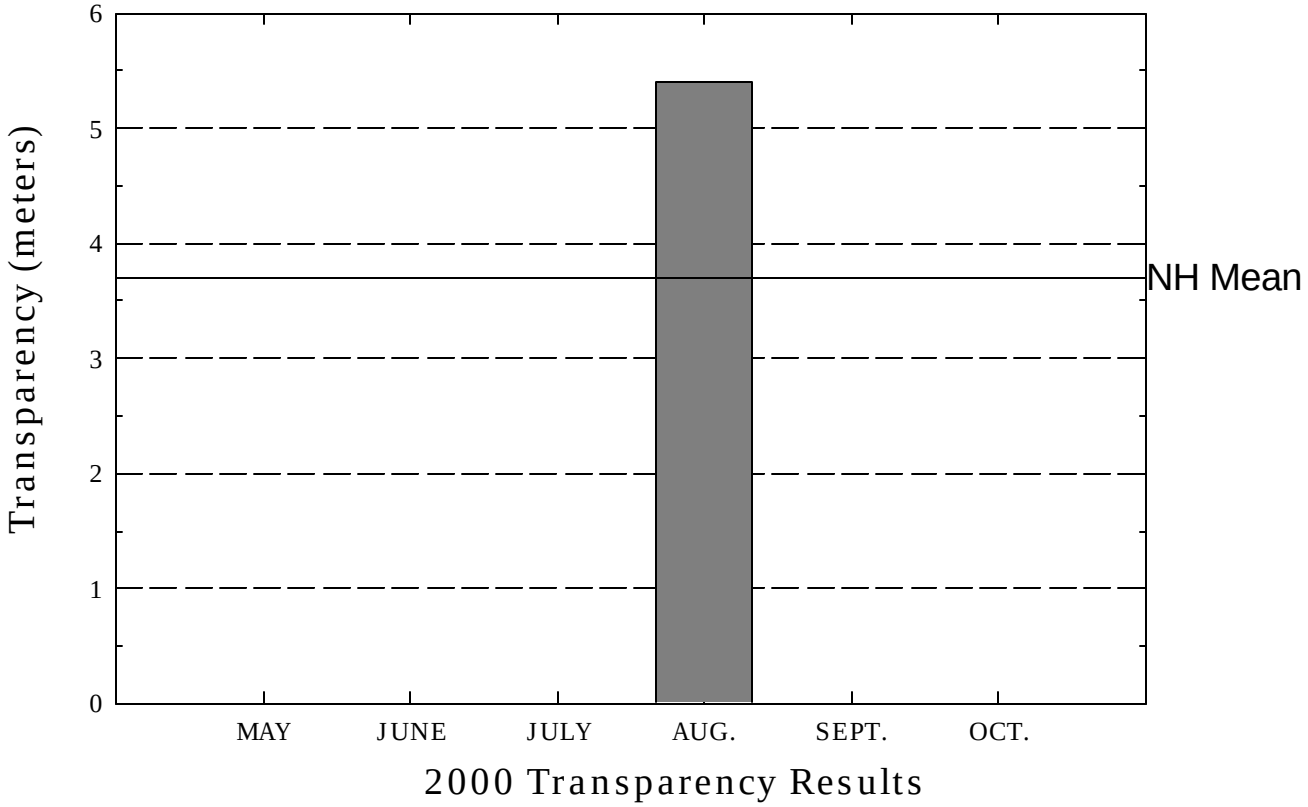
2000 Chlorophyll-a Results

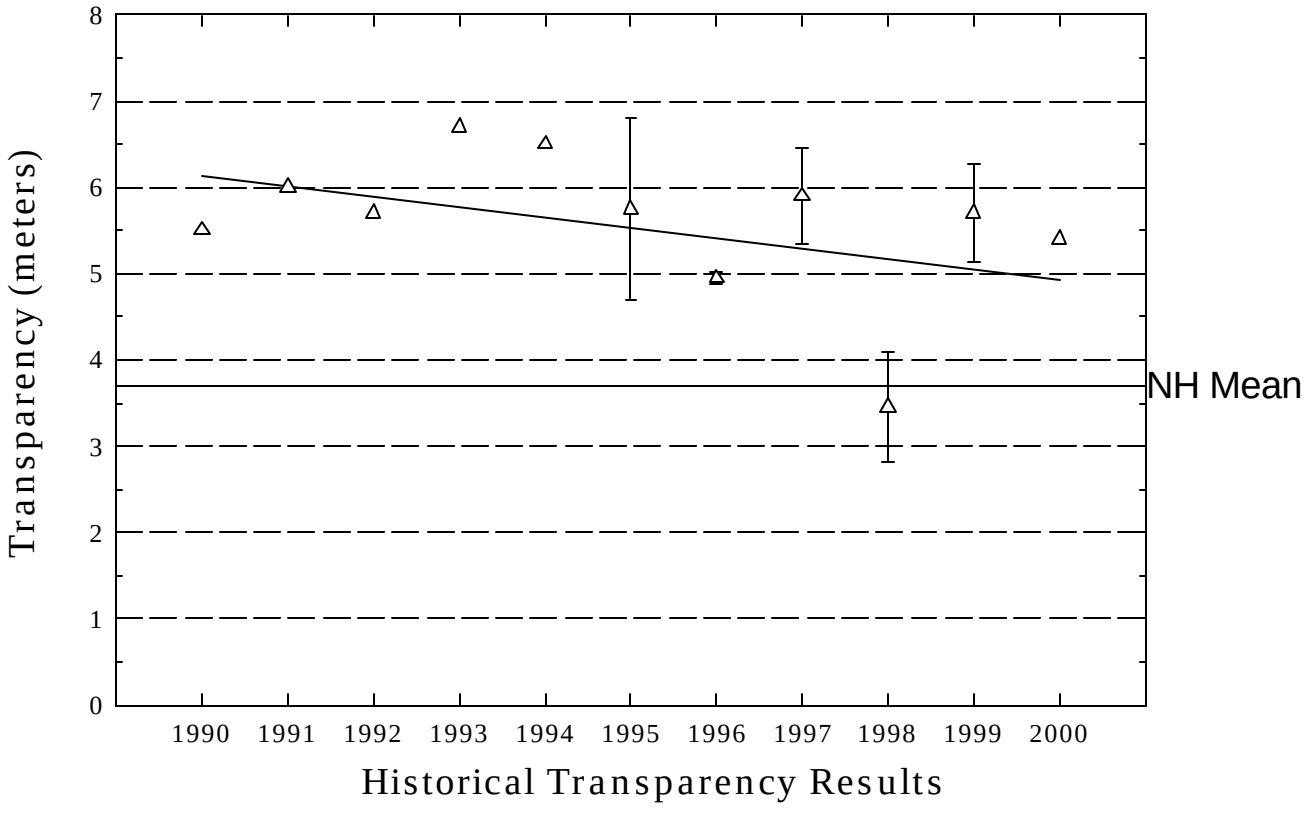


Historical Chlorophyll-a Results

Broad Bay

Figure 2. Monthly and Historical Transparency Results





Broad Bay

Figure 3. Monthly and Historical Total Phosphorus Data.

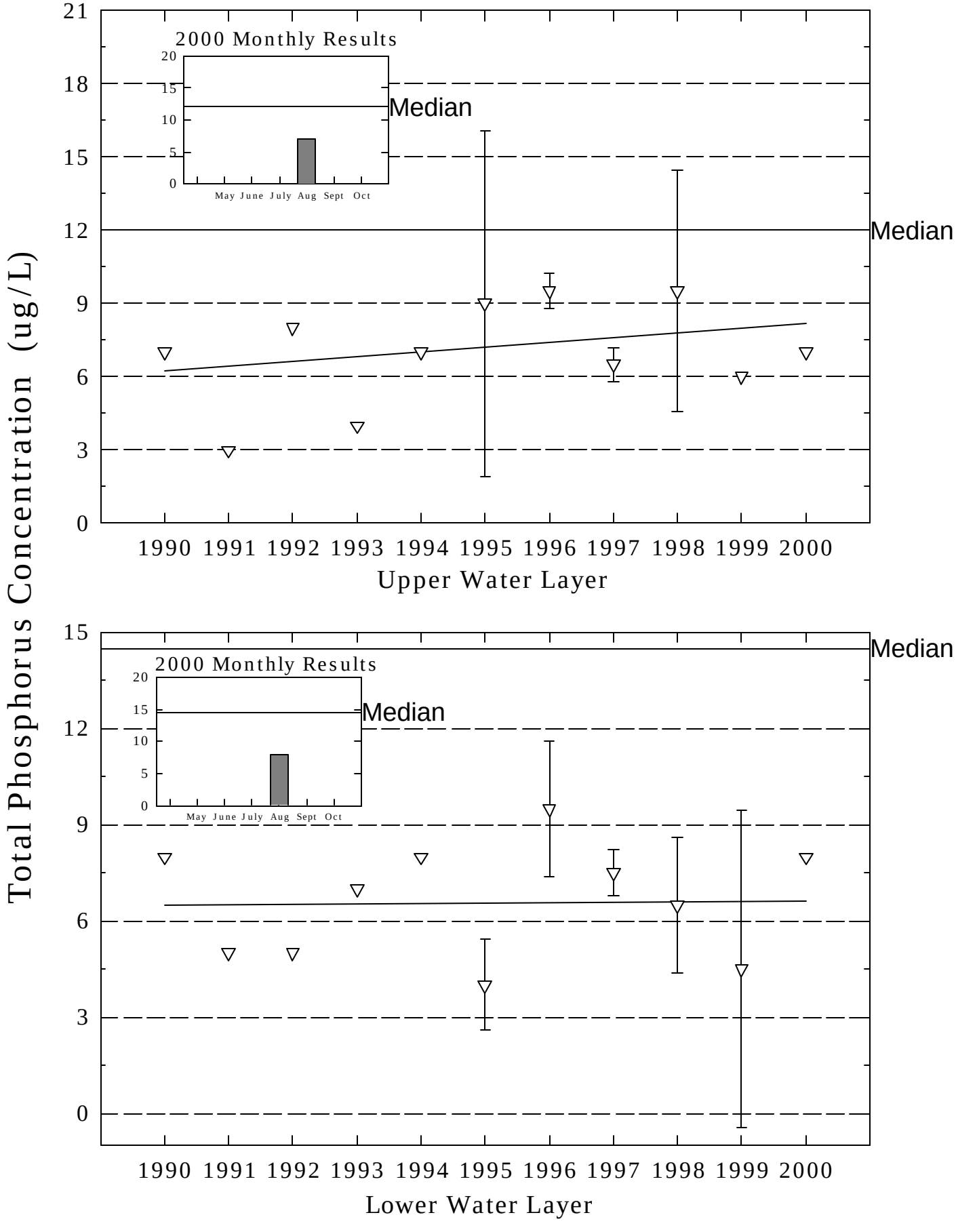


Table 1.

BROAD BAY
OSSIPEE

Chlorophyll-a results (mg/m^3) for current year and historical sampling periods.

Year	Minimum	Maximum	Mean
1990	2.89	2.89	2.89
1991	1.23	1.23	1.23
1992	3.08	3.08	3.08
1993	3.18	3.18	3.18
1994	3.06	3.06	3.06
1995	1.82	4.05	2.93
1996	2.21	3.75	2.98
1997	1.83	1.99	1.91
1998	1.90	3.84	2.87
1999	2.20	4.19	3.19
2000	3.46	3.46	3.46

Table 2.

BROAD BAY

OSSIPEE

Phytoplankton species and relative percent abundance.

Summary for current and historical sampling seasons.

Date of Sample	Species Observed	Relative % Abundance
08/09/1990	MICRACTINIUM	14
	DINOBRYON	13
07/29/1991	DINOBRYON	34
	SYNURA	18
	MICROCYSTIS	15
08/19/1992	TABELLARIA	50
	CERATIUM	15
	DINOBRYON	13
08/19/1993	DINOBRYON	59
	CHRYSOSPHAERELLA	16
08/12/1994	DINOBRYON	33
	ASTERIONELLA	18
	TABELLARIA	16
08/14/1995	CHRYSOSPHAERELLA	40
	DINOBRYON	31
	SYNURA	8
08/09/1996	ASTERIONELLA	39
	RHIZOSOLENIA	31
	DINOBRYON	10
08/08/1997	DINOBRYON	58
	TABELLARIA	16
	MICROCYSTIS	11
08/10/1998	TABELLARIA	73
	ASTERIONELLA	8
	DINOBRYON	8
08/09/1999	DINOBRYON	31
	TABELLARIA	29
	RHIZOSOLENIA	9
08/11/2000	RHIZOSOLENIA	44
	TABELLARIA	21
	SYNURA	21

Table 3.

BROAD BAY

OSSIPEE

Summary of current and historical Secchi Disk transparency results (in meters).

Year	Minimum	Maximum	Mean
1990	5.5	5.5	5.5
1991	6.0	6.0	6.0
1992	5.7	5.7	5.7
1993	6.7	6.7	6.7
1994	6.5	6.5	6.5
1995	5.0	6.5	5.7
1996	4.9	5.0	4.9
1997	5.5	6.3	5.9
1998	3.0	3.9	3.4
1999	5.3	6.1	5.7
2000	5.4	5.4	5.4

Table 4.

BROAD BAY

OSSIPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1990	6.91	6.91	6.91
	1991	6.90	6.90	6.90
	1992	6.93	6.93	6.93
	1993	6.87	6.87	6.87
	1994	6.87	6.87	6.87
	1995	6.40	6.86	6.57
	1996	6.24	6.47	6.34
	1997	6.46	7.05	6.66
	1998	6.27	6.68	6.43
	1999	6.71	6.80	6.75
	2000	6.71	6.71	6.71
HYPOLIMNION				
	1990	6.12	6.12	6.12
	1991	6.20	6.20	6.20
	1992	6.14	6.14	6.14
	1993	6.24	6.24	6.24
	1994	5.99	5.99	5.99
	1995	5.36	6.35	5.62
	1996	5.94	6.00	5.97
	1997	6.12	6.17	6.14
	1998	5.94	6.04	5.99
	1999	6.11	6.15	6.13
	2000	6.03	6.03	6.03

Table 4.

BROAD BAY

OSSIPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
METALIMNION				
	1990	6.28	6.28	6.28
	1991	6.70	6.70	6.70
	1992	6.43	6.43	6.43
	1993	6.60	6.60	6.60
	1994	6.18	6.18	6.18
	1995	5.67	6.39	5.90
	1996	5.96	6.02	5.99
	1997	6.34	6.42	6.38
	1998	6.02	6.07	6.04
	1999	6.25	6.41	6.32
	2000	6.12	6.12	6.12

Table 5.

BROAD BAY

OSSIPEE

Summary of current and historical Acid Neutralizing Capacity.
Values expressed in mg/L as CaCO .

Epilimnetic Values

Year	Minimum	Maximum	Mean
1990	5.30	5.30	5.30
1991	6.60	6.60	6.60
1992	5.30	5.30	5.30
1993	5.40	5.40	5.40
1994	5.90	5.90	5.90
1995	5.70	5.70	5.70
1996	4.00	4.70	4.35
1997	2.70	4.60	3.65
1998	3.30	4.60	3.95
1999	4.90	6.10	5.50
2000	5.70	5.70	5.70

Table 6.

BROAD BAY

OSSIPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1990	36.3	36.3	36.3
	1991	37.8	37.8	37.8
	1992	36.9	36.9	36.9
	1993	38.1	38.1	38.1
	1994	39.3	39.3	39.3
	1995	38.5	38.8	38.6
	1996	35.8	36.9	36.3
	1997	32.8	35.3	34.0
	1998	27.3	34.2	30.7
	1999	38.8	40.1	39.4
	2000	39.7	39.7	39.7
HYPOLIMNION				
	1990	33.1	33.1	33.1
	1991	33.5	33.5	33.5
	1992	35.7	35.7	35.7
	1993	34.2	34.2	34.2
	1994	35.5	35.5	35.5
	1995	34.4	36.7	35.5
	1996	35.0	35.6	35.3
	1997	31.7	32.6	32.1
	1998	34.0	34.7	34.3
	1999	36.4	37.3	36.8
	2000	37.6	37.6	37.6
METALIMNION				
	1990	32.7	32.7	32.7

Table 6.

BROAD BAY

OSSIPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
	1991	35.1	35.1	35.1
	1992	36.1	36.1	36.1
	1993	34.8	34.8	34.8
	1994	34.9	34.9	34.9
	1995	33.2	36.8	35.0
	1996	34.1	35.4	34.7
	1997	31.3	33.4	32.3
	1998	26.9	30.8	28.8
	1999	36.7	38.8	37.7
	2000	38.0	38.0	38.0

Table 8.

BROAD BAY

OSSIPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1990	7	7	7
	1991	3	3	3
	1992	8	8	8
	1993	4	4	4
	1994	7	7	7
	1995	4	14	9
	1996	9	10	9
	1997	6	7	6
	1998	6	13	9
	1999	6	6	6
	2000	7	7	7
HYPOLIMNION				
	1990	8	8	8
	1991	5	5	5
	1992	5	5	5
	1993	7	7	7
	1994	8	8	8
	1995	3	5	4
	1996	8	11	9
	1997	7	8	7
	1998	5	8	6
	1999	1	8	4
	2000	8	8	8
METALIMNION				
	1990	7	7	7

Table 8.

BROAD BAY

OSSIPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
	1991	5	5	5
	1992	5	5	5
	1993	6	6	6
	1994	9	9	9
	1995	3	6	4
	1996	7	8	7
	1997	6	8	7
	1998	7	7	7
	1999	1	8	4
	2000	9	9	9

Table 9.

BROAD BAY

OSSIPEE

Current year dissolved oxygen and temperature data.

Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
		August 11, 2000	
0.1	24.3	8.0	95.1
1.0	24.1	8.1	95.9
2.0	23.9	8.4	99.9
3.0	23.7	8.3	98.2
4.0	22.7	8.1	94.2
5.0	20.8	7.5	84.1
6.0	18.8	6.6	70.7
7.0	16.0	6.3	64.2
8.0	12.6	6.8	63.9
9.0	10.5	6.8	60.5
10.0	9.5	6.9	60.3
11.0	8.8	6.5	56.1
12.0	8.5	6.3	53.5
13.0	8.3	5.7	48.3
14.0	8.3	5.6	47.5
15.0	8.2	5.0	42.7
16.0	8.1	4.9	41.3
17.0	8.1	4.7	40.1
18.0	8.1	4.4	37.6
19.0	8.4	3.3	28.5
20.0	9.3	0.8	7.0

Table 10.

BROAD BAY

OSSIPEE

Historic Hypolimnetic dissolved oxygen and temperature data.

Date	Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
August 9, 1990	19.0	6.7	6.5	53.0
July 29, 1991	13.0	7.1	6.1	50.2
July 29, 1991	19.0	7.1	4.9	40.3
August 19, 1992	18.5	6.0	4.4	35.2
August 19, 1993	21.0	6.3	3.0	24.0
August 12, 1994	21.0	7.0	4.0	33.0
August 14, 1995	20.0	7.6	3.8	31.0
August 9, 1996	18.0	10.0	0.3	2.0
August 8, 1997	20.0	8.3	5.9	49.0
August 10, 1998	19.0	8.2	3.6	30.0
August 11, 2000	20.0	9.3	0.8	7.0

Table 11.

BROAD BAY
OSSIPEE

Summary of current year and historic turbidity sampling.
Results in NTU's.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1997	0.2	0.2	0.2
	1998	0.3	0.8	0.5
	1999	0.3	0.3	0.3
	2000	0.3	0.3	0.3
HYPOLIMNION				
	1997	0.2	0.4	0.3
	1998	0.7	1.1	0.9
	1999	0.4	0.5	0.4
	2000	0.8	0.8	0.8
METALIMNION				
	1997	0.2	0.4	0.3
	1998	0.3	0.7	0.5
	1999	0.3	0.5	0.4
	2000	0.3	0.3	0.3

Table 12.

BROAD BAY

OSSIPEE

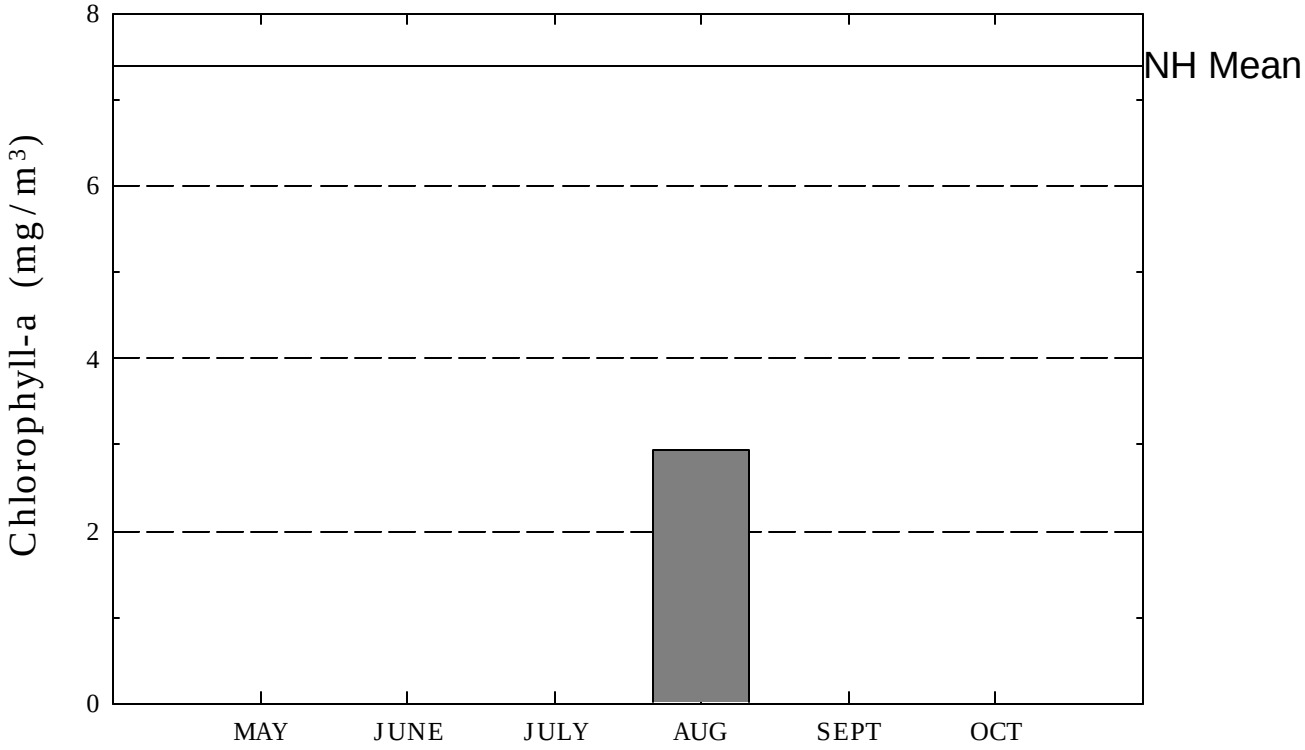
Summary of current year bacteria sampling.
Results in counts per 100ml.

Location	Date	E. Coli See Note Below
KRUZSCHAK COTTAGE		
	August 11	1

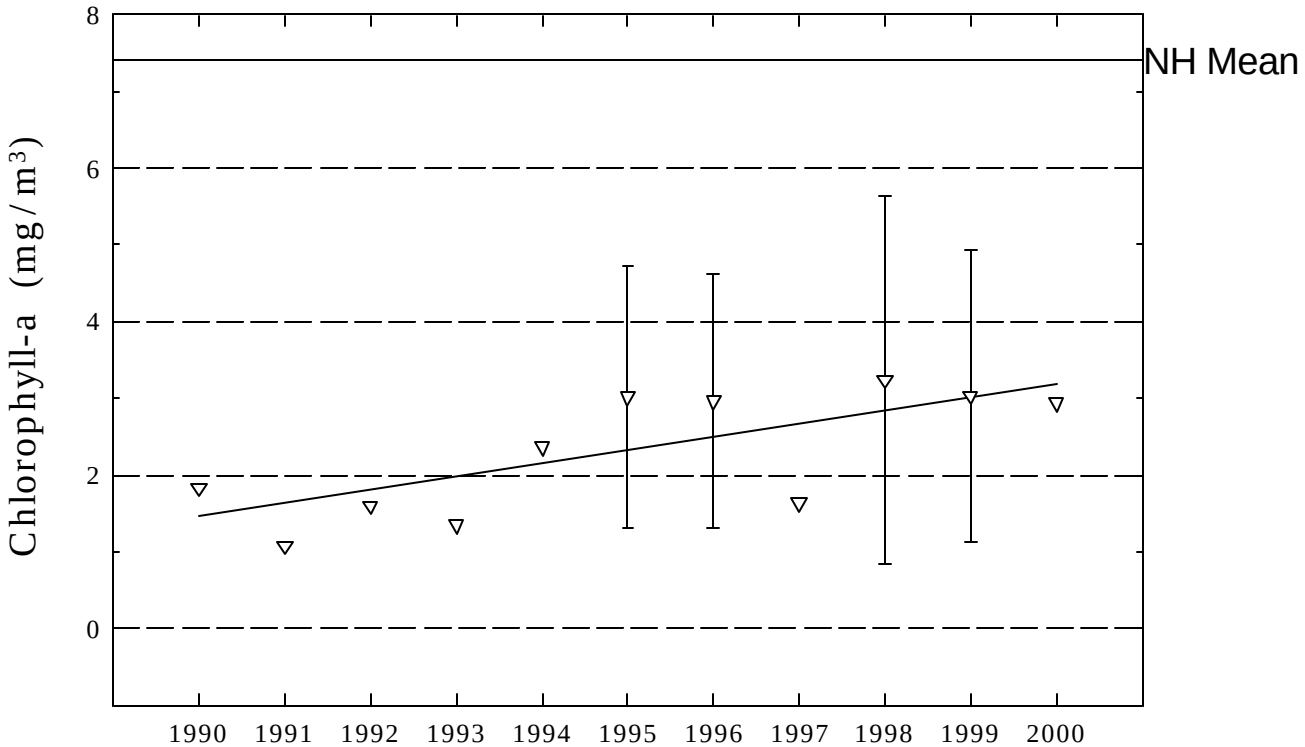
NOTE: "<" means "less than" and ">" means "greater than"

Leavitt Bay

Figure 1. Monthly and Historical Chlorophyll-a Results



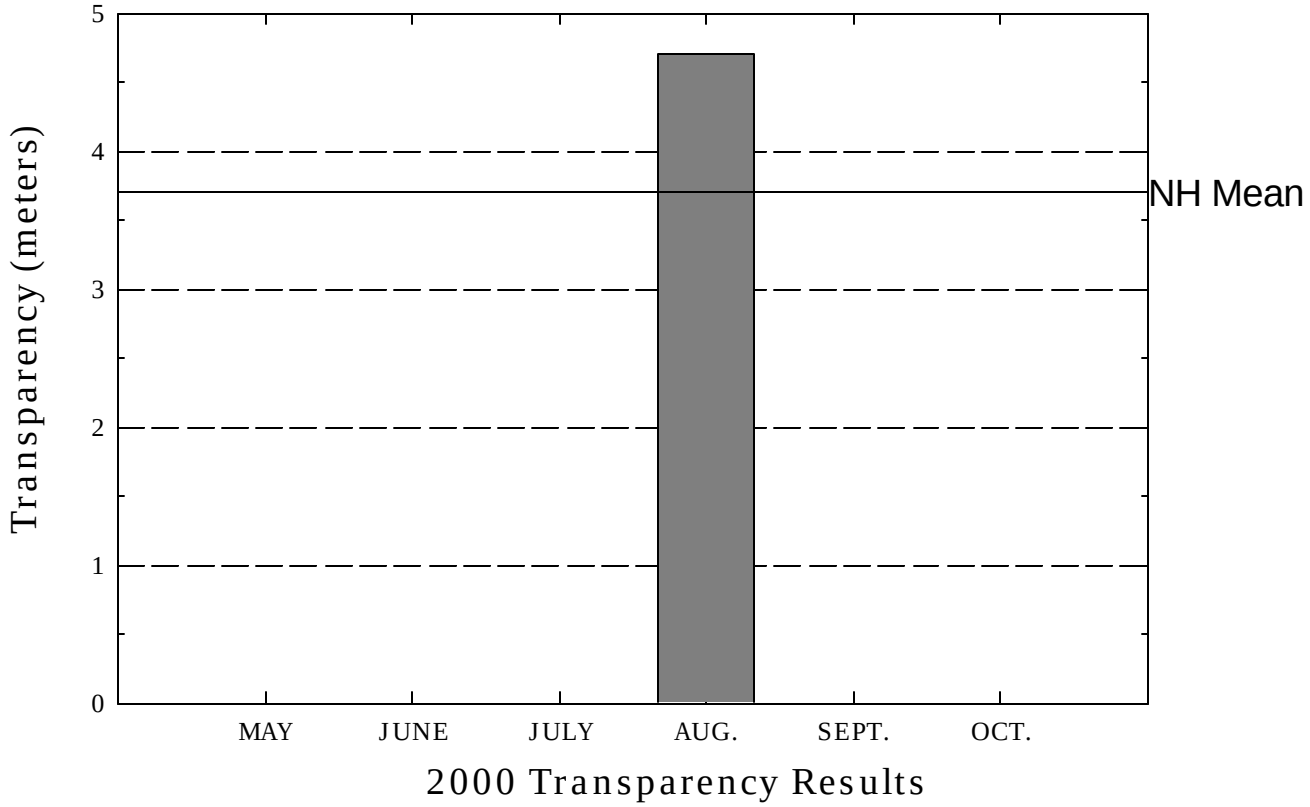
2000 Chlorophyll-a Results

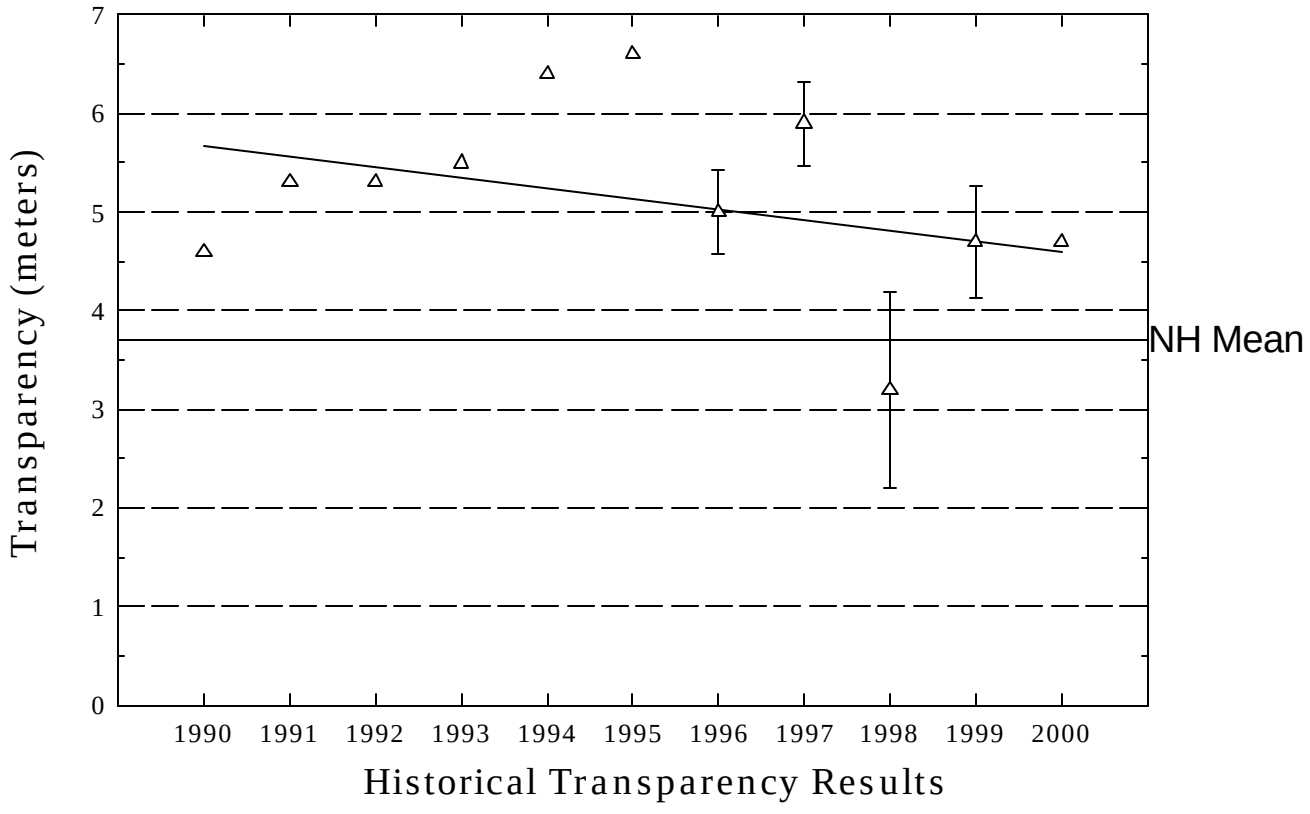


Historical Chlorophyll-a Results

Leavitt Bay

Figure 2. Monthly and Historical Transparency Results





Leavitt Bay

Figure 3. Monthly and Historical Total Phosphorus Data.

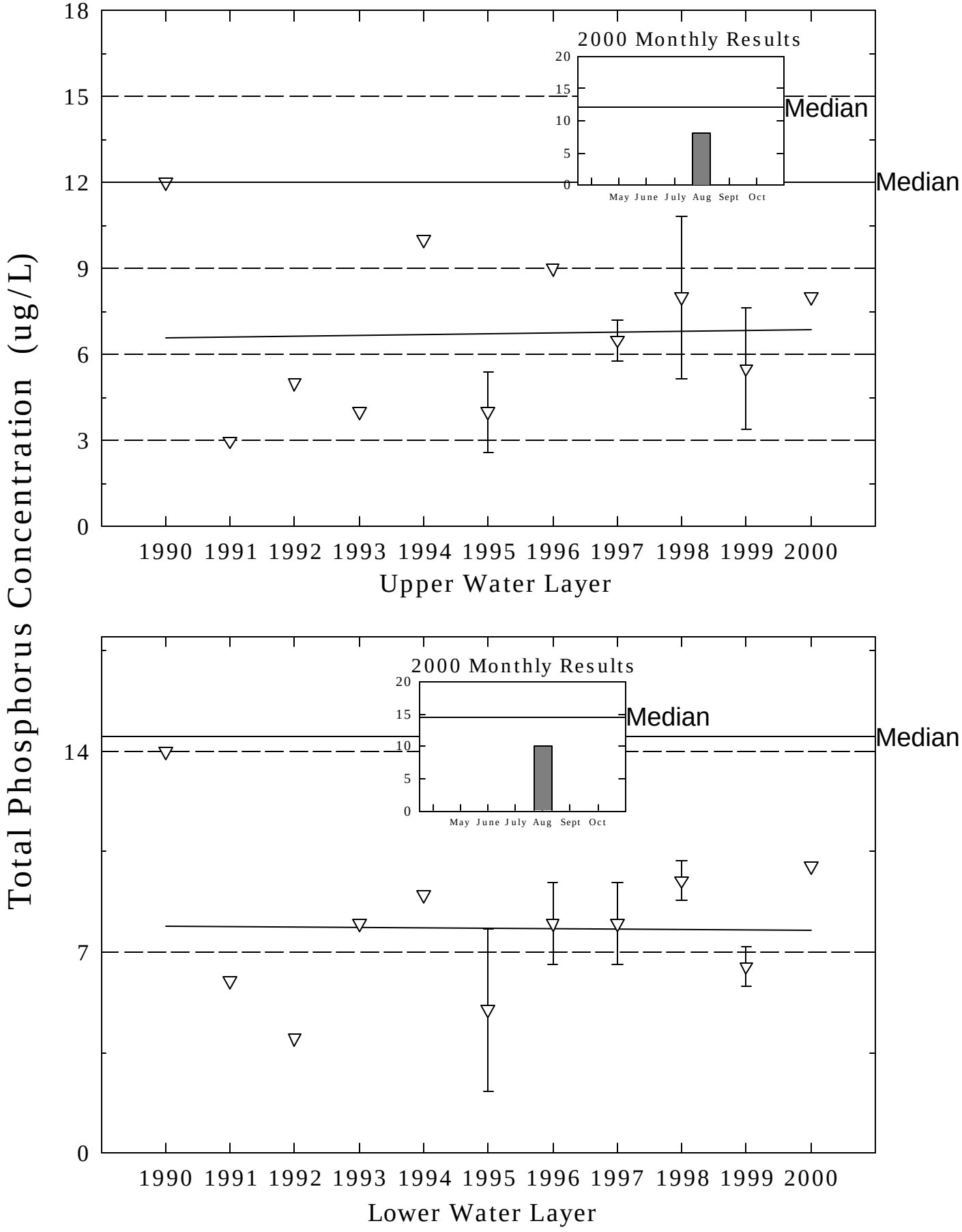


Table 1.

LEAVITT BAY

OSSIPEE

Chlorophyll-a results (mg/m^3) for current year and historical sampling periods.

Year	Minimum	Maximum	Mean
1990	1.83	1.83	1.83
1991	1.07	1.07	1.07
1992	1.59	1.59	1.59
1993	1.35	1.35	1.35
1994	2.37	2.37	2.37
1995	1.82	4.22	3.02
1996	1.80	4.13	2.96
1997	1.64	1.64	1.64
1998	1.54	4.93	3.23
1999	1.68	4.38	3.03
2000	2.94	2.94	2.94

Table 2.

LEAVITT BAY

OSSIPEE

Phytoplankton species and relative percent abundance.

Summary for current and historical sampling seasons.

Date of Sample	Species Observed	Relative % Abundance
08/09/1990	RHIZOSOLENIA	23
07/29/1991	DINOBRYON	39
	RHIZOSOLENIA	19
	MICROCYSTIS	10
08/19/1992	TABELLARIA	46
	CERATIUM	10
	RHIZOSOLENIA	13
08/19/1993	DINOBRYON	68
	RHIZOSOLENIA	20
08/12/1994	ASTERIONELLA	34
	DINOBRYON	29
	TABELLARIA	19
08/14/1995	DINOBRYON	42
	CHRYSOSPHAERELLA	20
	RHIZOSOLENIA	15
08/09/1996	TABELLARIA	46
	RHIZOSOLENIA	36
	MELOSIRA	9
08/08/1997	DINOBRYON	62
	TABELLARIA	19
	MICROCYSTIS	9
08/10/1998	TABELLARIA	73
	CHRYSOSPHARELLA	6
	DINOBRYON	6
08/09/1999	DINOBRYON	26
	TABELLARIA	38
	CHRYSOSPHAERELLA	11
08/11/2000	RHIZOSOLENIA	37
	SYNURA	30
	TABELLARIA	26

Table 3.

LEAVITT BAY

OSSIPEE

Summary of current and historical Secchi Disk transparency results (in meters).

Year	Minimum	Maximum	Mean
1990	4.6	4.6	4.6
1991	5.3	5.3	5.3
1992	5.3	5.3	5.3
1993	5.5	5.5	5.5
1994	6.4	6.4	6.4
1995	6.6	6.6	6.6
1996	4.7	5.3	5.0
1997	5.6	6.2	5.9
1998	2.5	3.9	3.2
1999	4.3	5.1	4.7
2000	4.7	4.7	4.7

Table 4.

LEAVITT BAY

OSSIPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1990	6.86	6.86	6.86
	1991	6.90	6.90	6.90
	1992	6.89	6.89	6.89
	1993	6.80	6.80	6.80
	1994	6.75	6.75	6.75
	1995	6.41	6.98	6.61
	1996	6.26	6.53	6.37
	1997	6.50	6.78	6.62
	1998	6.23	6.80	6.43
	1999	6.48	6.69	6.57
	2000	6.68	6.68	6.68
HYPOLIMNION				
	1990	6.68	6.68	6.68
	1991	6.50	6.50	6.50
	1992	6.86	6.86	6.86
	1993	6.33	6.33	6.33
	1994	6.29	6.29	6.29
	1995	5.40	6.28	5.65
	1996	5.82	5.90	5.86
	1997	6.15	6.27	6.21
	1998	6.10	6.18	6.14
	1999	6.17	6.18	6.17
	2000	6.26	6.26	6.26

Table 4.

LEAVITT BAY

OSSIPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
METALIMNION				
	1997	6.29	6.54	6.40
	1998	6.07	6.34	6.18
	1999	6.33	6.47	6.39
	2000	6.32	6.32	6.32

Table 5.

LEAVITT BAY

OSSIPEE

Summary of current and historical Acid Neutralizing Capacity.
Values expressed in mg/L as CaCO .

Epilimnetic Values

Year	Minimum	Maximum	Mean
1990	5.40	5.40	5.40
1991	5.20	5.20	5.20
1992	5.40	5.40	5.40
1993	5.20	5.20	5.20
1994	5.60	5.60	5.60
1995	6.00	6.00	6.00
1996	4.80	5.20	5.00
1997	3.60	5.00	4.30
1998	3.10	4.70	3.90
1999	5.70	6.10	5.90
2000	5.10	5.10	5.10

Table 6.

LEAVITT BAY
OSSIPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1990	36.0	36.0	36.0
	1991	36.8	36.8	36.8
	1992	37.2	37.2	37.2
	1993	38.0	38.0	38.0
	1994	39.2	39.2	39.2
	1995	36.6	39.7	38.1
	1996	36.6	36.9	36.7
	1997	33.4	34.8	34.1
	1998	27.6	33.4	30.5
	1999	39.5	41.1	40.3
	2000	40.0	40.0	40.0
HYPOLIMNION				
	1990	36.2	36.2	36.2
	1991	36.8	36.8	36.8
	1992	37.2	37.2	37.2
	1993	40.5	40.5	40.5
	1994	39.4	39.4	39.4
	1995	37.6	38.3	37.9
	1996	36.6	38.5	37.5
	1997	32.8	35.1	33.9
	1998	27.2	35.8	31.5
	1999	38.3	42.3	40.3
	2000	47.5	47.5	47.5
METALIMNION				
	1997	32.8	36.2	34.5

Table 6.

LEAVITT BAY
OSSIPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
	1998	27.4	34.8	31.1
	1999	38.4	41.1	39.7
	2000	41.4	41.4	41.4

Table 8.

LEAVITT BAY

OSSIPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1990	12	12	12
	1991	3	3	3
	1992	5	5	5
	1993	4	4	4
	1994	10	10	10
	1995	3	5	4
	1996	9	9	9
	1997	6	7	6
	1998	6	10	8
	1999	4	7	5
	2000	8	8	8
HYPOLIMNION				
	1990	14	14	14
	1991	6	6	6
	1992	4	4	4
	1993	8	8	8
	1994	9	9	9
	1995	3	7	5
	1996	7	9	8
	1997	7	9	8
	1998	9	10	9
	1999	6	7	6
	2000	10	10	10
METALIMNION				
	1997	8	8	8

Table 8.

LEAVITT BAY

OSSIPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
	1998	8	8	8
	1999	6	7	6
	2000	8	8	8

Table 9.

LEAVITT BAY

OSSIPEE

Current year dissolved oxygen and temperature data.

Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
		August 11, 2000	
0.1	24.6	8.2	98.6
1.0	24.1	8.2	97.4
2.0	24.0	8.1	96.1
3.0	23.9	8.0	95.4
4.0	23.3	7.8	91.4
5.0	22.1	6.7	76.4
6.0	21.4	5.3	59.7
7.0	20.7	5.2	58.4
8.0	19.0	3.6	38.9
9.0	16.1	1.1	11.2
10.0	15.0	0.7	6.7
11.0	14.6	0.7	7.2
12.0	14.5	0.8	7.9

Table 10.

LEAVITT BAY

OSSIPEE

Historic Hypolimnetic dissolved oxygen and temperature data.

Date	Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
August 9, 1990	5.0	23.1	8.4	98.7
July 29, 1991	6.0	20.5	8.8	98.3
August 18, 1992	7.0	18.8	5.3	57.2
August 19, 1993	10.0	13.0	1.0	9.0
August 12, 1994	11.0	11.3	1.0	9.0
August 12, 1994	12.0	11.0	0.8	7.0
August 14, 1995	10.5	11.7	0.7	6.0
August 9, 1996	10.0	19.0	3.2	34.0
August 8, 1997	10.0	12.6	2.7	25.0
August 10, 1998	11.0	20.4	1.0	11.0
August 11, 2000	12.0	14.5	0.8	7.9

Table 11.

LEAVITT BAY
OSSIPEE

Summary of current year and historic turbidity sampling.
Results in NTU's.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1997	0.2	0.2	0.2
	1998	0.3	0.8	0.5
	1999	0.3	0.3	0.3
	2000	0.4	0.4	0.4
HYPOLIMNION				
	1997	0.2	0.3	0.3
	1998	0.6	1.1	0.9
	1999	0.3	0.6	0.5
	2000	5.4	5.4	5.4
METALIMNION				
	1997	0.2	0.5	0.3
	1998	0.4	0.6	0.5
	1999	0.3	0.6	0.4
	2000	0.5	0.5	0.5

Table 12.

LEAVITT BAY

OSSIPEE

Summary of current year bacteria sampling.
Results in counts per 100ml.

Location	Date	E. Coli See Note Below
CONNELLY COTTAGE		
	August 11	0
THOMSON COTTAGE		
	August 11	0

NOTE: "<" means "less than" and ">" means "greater than"